Remarks

1. Summary of Office Action

In the Office Action mailed December 5, 2005, the Examiner rejected claims 2-3, 5, 8-9, and 11 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,493,550 (Raith) in view of U.S. Patent No. 6,377,608 (Zyren). The Examiner rejected claims 6-7, 10, and 12 under 35 U.S.C. §103(a) as being unpatentable over Raith in view of Zyren and further in view of U.S. Patent No. 6,484,027 (Mauney). The Examiner provisionally rejected claims 3, 8-9, and 11 under the judicially created doctrine of double patenting over claims 11-12, 32-33, and 47-48 of co-pending U.S. Patent Application No. 10/443,639. The Examiner rejected claims 2 and 5 on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 11-12, 32-33, and 47-48 of U.S. Patent Application No. 10/443,639 in view of Zyren. The Examiner rejected claims 6-7, 10, and 12 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application No. 10/443,639 in view of Zyren and further in view of Mauney.

2. Amendments and Pending Claims

Applicant has amended claims 3, 9, and 11-12 and added new claims 13-17. Now pending in this application are claims 2-3 and 5-17, of which claims 3, 9, and 11 are independent.

3. Response to § 103 Rejections

a. Raith and Zyren

The Examiner rejected claims 2-3, 5, 8-9, and 11 under 35 U.S.C. §103(a) as being unpatentable over Raith in view of Zyren. Applicant has amended independent claims 3, 9, and 11. Claims 3, 9, and 11, as amended, clearly distinguish over the combination of Raith and

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Zyren because the combination of Raith and Zyren fails to disclose or suggest all of the limitations of any of these claims.

With respect to amended claim 3, at a minimum, for instance, the combination of Raith and Zyren fails to teach or suggest (i) a radio frequency receiver for ***substantially simultaneously*** receiving radio frequency signals of ***substantially the entire band*** of the wireless LAN, and (ii) programming for measuring and analyzing the energy of the received radio frequency signals of the ***entire band*** of the wireless LAN for the purpose of determining if the radio frequency signals include pulses having a duration and periodicity appropriate for a beacon issuing from a wireless LAN access point. (Emphasis added).

With respect to amended claims 9 and 11, at a minimum, for instance, the combination of Raith and Zyren fails to teach or suggest (i) receiving, ***substantially simultaneously***, radio frequency signals of ***substantially the entire band*** of the wireless LAN, and (ii) determining if the received radio frequency signals of the ***entire band*** of the wireless LAN include pulses having a duration and periodicity appropriate for a beacon issuing from a wireless LAN access point. (Emphasis added).

At best, the combination of Raith and Zyren teaches (i) taking advantage of the availability of a prescribed unused region of a portion of the ISM band (at either or both ends of the ISM band) to generate a pulsed warning beacon, (ii) the beacon is placed at a fixed frequency within the ISM band, and (iii) by periodically tuning a receive frequency synthesizer of its transceiver to this frequency, an ad hoc network radio is able to monitor whether it is in close proximity to an infrastructure network. (See, e.g., Zyren at col. 1, lines 60-63, col. 5, lines 51-64, and Figures 5-7). Applicant submits that these teachings of Zyren, along with Raith and the rest of Zyren, do not teach or suggest (i) substantially simultaneously receiving radio frequency

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signals of substantially the entire band of the wireless LAN, and (ii) determining if the received radio frequency signals of the entire band of the wireless LAN include pulses having a duration and periodicity appropriate for a beacon issuing from a wireless LAN access point, as claimed in claims 3, 9, and 11.

In rejecting claims 3, 9, and 11 the Examiner indicated that Raith does not specifically teach radio frequency signals including pulses having a duration and periodicity appropriate for a beacon issuing from a WLAN access point, but that Zyren teaches (i) a beacon generator installed in the vicinity of an access point of a WLAN infrastructure, (ii) the beacon generator periodically generates a pulsed beacon signal to indicate the presence of the WLAN, and (iii) a hop sequence and a system clock data are embedded in the beacon modulation, which inherently includes duration and periodicity. However, these teachings of Zyren, as well as Raith and the other portions of Zyren, do not teach or suggest (i) substantially simultaneously receiving radio frequency signals of substantially the entire band of the wireless LAN, and (ii) determining if the received radio frequency signals of the entire band of the wireless LAN include pulses having a duration and periodicity appropriate for a beacon issuing from a wireless LAN access point, as claimed in amended claims 3, 9, and 11.

Applicant submits that claims 3, 9, and 11 are allowable because the combination of Raith and Zyren fails to disclose or suggest all of the limitations of claims 3, 9, and 11. Further, because claims 2, 5, and 8 depend on allowable claim 3 and necessarily include all of the limitations of claim 3, claims 2, 5, and 8 are allowable as well.

b. Raith, Zyren, and Mauney

The Examiner rejected claims 6-7, 10, and 12 under 35 U.S.C. §103(a) as being unpatentable over Raith in view of Zyren and further in view of Mauney. Each of claims 6-7,

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10, and 12 depend from one of independent claims 3, 9, or 11, and necessarily include all of the limitations of claim 3, 9, or 11. Amended claims 3, 9, and 11, and claims 6-7, 10, and 12, clearly distinguish over the combination of Raith, Zyren, and Mauney because the combination of Raith, Zyren, and Mauney fails to disclose or suggest all of the limitations of any of these claims.

With respect to amended claim 3, at a minimum, for instance, the combination of Raith, Zyren, and Mauney fails to teach or suggest (i) a radio frequency receiver for ***substantially simultaneously*** receiving radio frequency signals of ***substantially the entire band*** of the wireless LAN, and (ii) programming for measuring and analyzing the energy of the received radio frequency signals of the ***entire band*** of the wireless LAN for the purpose of determining if the radio frequency signals include pulses having a duration and periodicity appropriate for a beacon issuing from a wireless LAN access point. (Emphasis added).

With respect to amended claims 9 and 11, at a minimum, for instance, the combination of Raith, Zyren, and Mauney fails to teach or suggest (i) receiving, ***substantially simultaneously***, radio frequency signals of ***substantially the entire band*** of the wireless LAN, and (ii) determining if the received radio frequency signals of the ***entire band*** of the wireless LAN include pulses having a duration and periodicity appropriate for a beacon issuing from a wireless LAN access point. (Emphasis added).

At best, the combination of Raith, Zyren, and Mauney teaches (i) taking advantage of the availability of a prescribed unused region of a portion of the ISM band (at either or both ends of the ISM band) to generate a pulsed warning beacon, (ii) the beacon is placed at a fixed frequency within the ISM band, and (iii) by periodically tuning a receive frequency synthesizer of its transceiver to this frequency, an ad hoc network radio is able to monitor whether it is in close proximity to an infrastructure network, and (iv) setting a counter i to 1, tuning a receiver of a

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wireless handset to a high frequency F_{hi}, waiting for a synchronization signal, modifying the counter if no synchronization signal is received, and then tuning the receiver to the next high frequency F_{hi}. (See, e.g., Zyren at col. 1, lines 60-63, col. 5, lines 51-64, and Figures 5-7; and Mauney at col. 18, lines 35-49, and Figure 6A). However, Applicant submits these teachings of the combination of Raith, Zyren, and Mauney, do not teach or suggest (i) substantially simultaneously receiving radio frequency signals of substantially the entire band of the wireless LAN, and (ii) determining if the received radio frequency signals of the entire band of the wireless LAN include pulses having a duration and periodicity appropriate for a beacon issuing from a wireless LAN access point, as claimed in claims 3, 9, and 11.

Since claims 6-7, 10, and 12 each depend on claim 3, 9, or 11, and necessarily include all of the limitations of claim 3, 9, or 11, the combination of Raith, Zyren, and Mauney also fails to teach or suggest all of the limitations of claims 6-7, 10, and 12, and thus claims 6-7, 10, and 12 are allowable over the combination of Raith, Zyren, and Mauney.

4. Response to Double Patenting Rejections

a. Claims 3, 8-9, and 11

The Examiner provisionally rejected claims 3, 8-9, and 11 under the judicially created doctrine of double patenting over claims 11-12, 32-33, and 47-48 of the '639 Application. Applicant has amended claim 3, 9, and 11. The subject matter now claimed in claims 3, 9, and 11, and claim 8 which depends on claim 3 and necessarily includes all the limitations of claim 3, is not disclosed in the '639 Application. At a minimum, for instance, the limitation of substantially simultaneously receiving radio frequency signals of substantially the entire band of the wireless LAN, as claimed in claims 3, 9, and 11, is not disclosed in the '639 Application.

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Applicant submits that the provisional rejection of claims 3, 8-9, and 11 has been overcome by amending claims 3, 9, and 11.

b. Claims 2 and 5

The Examiner rejected claims 2 and 5 on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 11-12, 32-33, and 47-48 of the '639 Application in view of Zyren. Claims 2 and 5 depend on claim 3, which has now been amended. Claims 2 and 5 necessarily include all of the limitations of claim 3.

Subject matter now claimed in claim 3 is not disclosed or suggested in the combination of '639 Application and Zyren. At a minimum, for instance, the limitations of a radio frequency receiver for substantially simultaneously receiving radio frequency signals of substantially the entire band of the wireless LAN, and programming for measuring and analyzing the energy of the received radio frequency signals of the entire band of the wireless LAN for the purpose of determining if the radio frequency signals include pulses having a duration and periodicity appropriate for a beacon issuing from a wireless LAN access point, are not disclosed or suggested in the combination of the '639 Application and Zyren. Applicant submits that the rejection of claims 2 and 5 on the ground of non-statutory obviousness-type double patenting has been overcome by amending claim 3.

c. Claims 6-7, 10, and 12

The Examiner rejected claims 6-7, 10, and 12 under 35 U.S.C. §103(a) as being unpatentable over the '639 Application in view of Zyren and further in view of Mauney. This rejection was listed under a heading of Double Patenting. Claims 6-7, 10, and 12 depend on one of amended claims 3, 9, or 11. Claims 6-7, 10, and 12 necessarily include all of the limitations

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of claim 3, 9, or 11. Subject matter now claimed in claims 3, 9, and 11 is not disclosed or suggested in the combination of the '639 Application, Zyren, and Mauney.

With respect to amended claim 3, at a minimum, for instance, the combination of the '639 Application, Zyren, and Mauney fails to teach or suggest (i) a radio frequency receiver for substantially simultaneously receiving radio frequency signals of substantially the entire band of the wireless LAN, and (ii) programming for measuring and analyzing the energy of the received radio frequency signals of the entire band of the wireless LAN for the purpose of determining if the radio frequency signals include pulses having a duration and periodicity appropriate for a beacon issuing from a wireless LAN access point.

With respect to amended claims 9 and 11, at a minimum, for instance, the combination of the '639 Application, Zyren, and Mauney fails to teach or suggest (i) receiving, substantially simultaneously, radio frequency signals of substantially the entire band of the wireless LAN, and (ii) determining if the received radio frequency signals of the entire band of the wireless LAN include pulses having a duration and periodicity appropriate for a beacon issuing from a wireless LAN access point.

Applicant submits that the rejection of claims 6-7, 10, and 12 under 35 U.S.C. §103(a) has been overcome by amending claims 3, 9, and 11.

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5. Conclusion

For the foregoing reasons, Applicant submits that claims 2-3 and 5-17 are in condition for allowance. Therefore, Applicant respectfully requests favorable reconsideration and allowance of all of the claims.

Respectfully submitted,

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